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Docket No. 0670-0264  
Application Serial No. 09/890,863**REMARKS**

The Official Action mailed April 10, 2003, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time.

The Applicants note with appreciation the consideration of the Information Disclosure Statement filed on August 7, 2001.

Paragraph 2 of the Official Action objects to Fig. 7 as lacking a designation such as "Prior Art." As required by the Official Action, the Applicants have amended Fig. 7. Reconsideration is requested.

Claims 10-18 were pending in the present application. Claims 10-18 have been canceled, and new claims 19-24 have been added to better recite the features of the present invention. Claims 19-24 are now pending in the present application, of which claims 19 and 23-24 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance.

The present invention relates to a woven fabric for a loudspeaker diaphragm, and is directed to improving tensile strength and the appearance of the fabric. In the prior art, a fabric for a speaker diaphragm is colored after the fabric is woven so that a lattice pattern will not appear in the color of the woven fabric for the speaker diaphragm. However, when a PBO fiber is woven into the fabric so as to improve the tensile strength of the fabric, a problem of a formation of the lattice pattern becomes more noticeable because the PBO fiber has a characteristic that the PBO fiber itself is difficult to dye or color. In order to solve the above problem, the present invention teaches constituting a twisted yarn, a ply yarn, a core yarn, a covered yarn or a covered yarn of a plurality of fibers containing at least a colored fiber and a PBO fiber and weaving this thread into fabric so as to provide the woven fabric for the loudspeaker diaphragm having satisfactory tensile strength without the appearance of the lattice pattern. Moreover, by using a colored fiber in the threads of the fabric, a desired color can be realized without dying the fibers during or after weaving of the fabric. In other words, with the present invention, one can omit the dying process after weaving.

Paragraph 4 of the Official Action rejects claims 10-18 as being anticipated by U.S. Patent No. 5,233,821 to Weber, Jr. et al. Claims 10-18 have been canceled and new claims 19-22 have been added. The Applicants respectfully submit that an anticipation rejection

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cannot be maintained against the independent claims of the present invention, as amended. Weber does not teach all the elements of the claims, either explicitly or inherently.

Weber is directed to providing a fabric for a garment which is useful for protection against fire and/or cutting. More specifically, Weber appears to describe synthesizing a fiber such as PBO having a desired tensile strength, forming a composite thread of a plurality of fibers containing the synthesized fiber, wrapping the composite thread with a wrap fiber and weaving the wrapped composite threads into the fabric by a prior art method.

The present invention relates to a fabric for a loud-speaker diaphragm as recited in new claims 19-24 submitted herewith. To the contrary, Weber relates to a garment for protection against fire and/or cutting. Therefore, the field of invention of Weber is entirely different from the present invention and Weber fails to disclose a loud-speaker diaphragm or a fabric for a loud-speaker diaphragm as recited in the currently pending claims. It is respectfully submitted that Weber, which is directed to a protective garment, fails to disclose each and every limitation of the subject application, which is directed to a loud-speaker diaphragm, and thus that an anticipation rejection cannot be maintained. Favorable reconsideration is requested.

With respect to claims 21 and 22, the Official Action asserts that "the limitation that the woven fabric is used in a loud-speaker is viewed as intended use" (page 3, Paper No. 5). The Applicants traverse the assertion that claims 21 and 22 are merely a recitation of the intended use of the fabric. Claim 21 recites a diaphragm for a loud-speaker, characterized in that the woven fabric for the loud-speaker diaphragm according to claims 19 or 20 is used in at least a portion of the diaphragm. Claim 22 recites a loud-speaker comprising a loud-speaker diaphragm, characterized in that the loud-speaker diaphragm is made up of the woven fabric for loud-speaker diaphragm according to claims 19 or 20. Clearly, claim 21 is directed to a diaphragm, a portion of which is made from a fabric which is woven from a thread comprising a fiber with poor dye affinity such as PBO and a fiber colored with dyes or pigments. Claim 22 is directed to a loud-speaker comprising a loud-speaker diaphragm which is also made from a fabric as described above. These features are described in the specification, for example at paragraph 34, and in the drawings at Figs. 6(A) and 6(B). The diaphragm and loud-speaker recited in claims 21 and 22 are not merely intended use. Weber clearly does not teach either a diaphragm or a loud-speaker.

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Furthermore, new independent claims 23 and 24 are added that are clearly directed to a diaphragm for a loud-speaker and a loud-speaker itself. These claims positively recite limitations directed to a loud-speaker and a diaphragm and it is respectfully submitted that Weber fails completely to disclose or suggest these features. Favorable consideration of new claims 23-24 is also requested.

Since Weber does not teach all the elements of the claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) are in order and respectfully requested.

It further appears that the Official Action cites U.S. Patent No. 4,936,085 to Kolmes et al., U.S. Patent No. 4,918,912 to Warner and U.S. Patent No. 4,856,110 to Giesick to support the rejection. However, it is unclear that Kolmes, Warner and Giesick are officially of record with respect to the anticipation rejection of the claims. In any event, Kolmes, Warner and Giesick do not teach all the elements of the claims, either explicitly or inherently. Specifically, Kolmes, Warner and Giesick do not teach either improving the appearance of a fabric or forming a thread from a fiber colored with dyes or pigments. Since Kolmes, Warner and Giesick do not teach all the elements of the claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

  
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